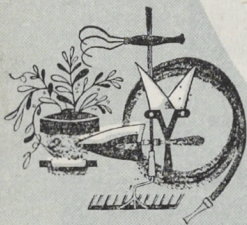




252-5870



Guide to Better Home Gardens



Compliments of . . .

Lacombe Nurseries Limited

P.O. BOX 1480

LACOMBE — ALBERTA

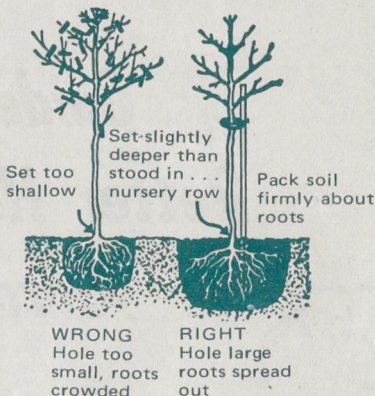
TRANSPLANTING

It should be remembered that trees and shrubs are living things. Transplanting is a **DRASTIC SURGICAL OPERATION** to a tree. There is nothing the nurseryman can do to a tree or put into it to make it proof against neglect. However, losses can be minimized and even eliminated by adequate care.

BE SURE TO REMOVE ALL PACKING MATERIAL FROM TREES AND SHRUBS BEFORE PLANTING, except in the case of balled and burlapped evergreens, which should be planted with the burlap on the ball. (See page 6.)

Burlap will eventually rot but other wrapping material will not.

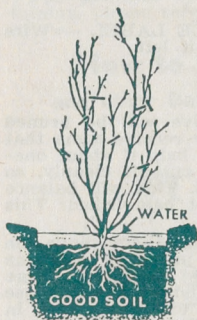
Do not put manure or fertilizer in the hole with the roots, as this will often kill the tree.



PLANTING

Be sure the hole is large enough to take the roots without crowding, and deep enough to place the tree one or two inches deeper than it grew in the nursery. **FILL IN WITH GOOD TOP SOIL AND KEEP TRAMPING FIRMLY WHILE FILLING.** Failure to firm soil, especially at bottom, is a frequent cause of loss.

WATERING



After planting form a depression that will hold about one pail of water around the tree and fill with water. In cool spring and fall weather, for the first year and to a less extent during the second year, refill often enough to keep soil well moistened but not soaked. BUT DURING HOT DAYS OF MID-SUMMER FILL THIS DEPRESSION WITH WATER ONCE OR TWICE A WEEK. During hot summer weather well soaked soil can become parched within a few days.

DON'T DEPEND ON THE LAWN SPRINKLER. It never gives trees enough water down where the roots are.

If going away for a holiday in mid-summer, arrange to have newly planted trees watered while away.

If you don't water as suggested above you will have losses, especially with BIRCH and EVER-GREENS.

Birch grow in nature only where moisture is adequate, and even when established require considerable moisture to keep them healthy.

Better leave a wide shallow depression around them when planting that will hold a good quantity of water. This should be given them frequently during warm dry weather in subsequent years.

If not given a good start by adequate care during the first couple of years, trees may remain poor and stunted.

OVER-WATERING IS POSSIBLE — If soil is kept continually soaked to such an extent that air cannot be absorbed, this would be harmful. However, we emphasize the need of frequent deep watering, because we have seen so many cases where it was honestly believed the trees were well watered but examination showed the soil below where the roots were situated was quite dry.

TRANSPLANTING IS A SHOCK TO A TREE, and it will often be set back several weeks before leafing out. If leaves do not appear with other trees do not assume it is not growing. Often newly transplanted trees and shrubs will not leaf out until late June or July.

BRACING TREES

Tall trees should be braced for the first year to prevent high winds loosening them. If putting any

wire or string around the tree be sure to put heavy cardboard covered with burlap under the wire to prevent cutting the bark, as this would kill the tree.

BE SURE TO REMOVE TREE LABEL — Wire on the label will damage tree if left.

PRUNING

Many of the trees you receive will be pruned before being sent out. You may receive some that have not. In such cases it will help if about one-third of the side branches are cut off cleanly, so as to leave a well shaped head. This will balance root loss and help the tree get established. **This does not apply to evergreens.**

Elm, Ash and other shade trees should have the lower branches removed to the desired height, as the tree grows and before they become so large as to leave a slow healing wound. If cut off close to the main stem before they exceed $\frac{1}{2}$ inch in diameter, they will quickly heal over. Every year as the tree grows remove the bottom tier of branches. Do not try to remove too many at once. If this is done top growth will be forced and become weak and tend to bend over. Always leave a well balanced head and avoid a "palm tree" effect.

If tree is growing off vertical or with crooked stem, tying it to a straight stake for a few months will straighten it. Use a broad tying material that will not cut into the bark. **NEVER USE WIRE**

Shrubs can be pruned to get the desired shape. In the case of flowering shrubs, pruning reduces the flowering wood, and should be done only where essential to preserve size and form and should be done immediately after flowers have fallen.

PLANTS IN CONTAINERS

Many nurseries now sell plants in containers in order that material might be planted throughout the summer months. When this method is used, success in transplanting is sure to follow as the root systems are not disturbed. There are many types of containers used, from metal cans to manufactured paper pots. In the case of the metal cans, these are cut open at the nursery and the plant left in the can until it arrives home. The customer then simply removes the ball of soil from the can and transplants it into its new location.

Plants in manufactured paper pots might be taken out of the pot or transplanted in the pot, whichever you prefer. Caution must be taken to insure that the top of the pot is buried below the

surface of the soil. The pot will then rot away in due time.

For planting methods used for stock in containers, please refer to balled and burlapped plants below.

How to Plant Evergreens

and other Balled and Burlapped Plants



DON'T HANDLE BALLED TREES BY THE TOP — Lift up under the ball. Rough handling on the tops will loosen the roots and kill them.

LEAVE BURLAP ON EVERGREENS BALLED IN SOIL, WHEN PLANTING. All other packing material must be removed.

- (1) Dig hole deeper and a foot wider than ball of earth.
- (2) Set tree in hole with top of ball about 1½ inches below ground surface level.
- (3) Pour good top soil around the ball. Pack firmly with the heel while pouring.
- (4) Fill hole with soil. Pack firmly. Peat moss well mixed with soil will encourage root growth.
- (5) Cut burlap away from top after planting.
- (6) Pour a pail of water into hole when planting. **READ WATERING INSTRUCTIONS** on page 3 again.

A BALL OF SOIL ON AN EVERGREEN IS NO GUARANTEE THAT IT WILL GROW. That depends on watering and after care.

Pruning and Shaping Evergreens

PINE must be cut in the new soft growth only and it must be done in early June on the prairies. There will be no new buds on this new growth, but if cut early they will form around the cut. If left after mid-June new buds may not form and the branch may die back.

SPRUCE, BALSAM FIR, and LARCH are pruned by cutting the new shoots only. This is best done in late summer but must be done before growth starts the following spring. Cut must be made so as to leave one or more newly formed buds on the portion of shoot that is left. If there are no such buds left, that portion of stem will eventually die off.

CEDAR (Thuja) and JUNIPER are better pruned in spring and early summer and should be cut only in the new greener portions. Cuts in old unfoliated wood may cause them to die back.

Purpose of Pruning Evergreens

To develop symmetry or other desired forms, if one or more branches project too far so as to destroy symmetry it should be checked either by cutting back the new end shoots or simply by removing the end bud on any such shoot.

Don't cut off too much. Removal of the end buds is often sufficient. This will check the following year's growth on this branch and enable other branches to catch up with it. Similarly if a section of the tree has developed beyond other sections so as to make the tree un-symmetrical, all the branches in this section should be checked in this manner.

Double or Non-upright Headers

If two or more leaders form (double headers) the less desirable of such leaders can be cut back to enable the selected leader to get ahead of them.

Sometimes the top bud on a leader may fail to grow into the new leader. In this case select the most vigorous shoot nearest the top centre of the tree and tie it upright to a stake, to form a new leader. Within 4 to 6 weeks the stake can be removed and the new leader will remain in position.

If the leader goes off at an angle, tie it up similarly for a few weeks to a stake.

Sunscald in Evergreens

Dry falls cause sunscalding in evergreens, particularly in cedar. If fall is dry, start watering heavily around Sept. 15 and continue once a week until freeze-up to minimize sunscald.

Don't water cedar from Aug. 15 to Sept. 15 to induce fall ripening.

Compact and Symmetrical Forms in Evergreens

If an open space develops on a tree, this can often be filled in by turning a surplus branch from another side of the tree around, so that it will grow into this space. If tied into this new position for one season it will remain there.

The top shoot (leader) may grow too long in a season and create a wide gap between the tiers of branches which form at the top and bottom of it, giving the tree a thin appearance. This can be prevented by cutting off the upper portion of the long leader, just above a well developed bud. The following year as this bud grows out, it can, if necessary, be staked into vertical position.

Don't be afraid to sacrifice growth by shortening a leader that is too long. It will repay you in a better shaped tree.

Pruning Dwarf Mountain Pine and Dwarfing Evergreens

Dwarf Mountain Pine should be sheared through all the new growth in early June. This will give it a compact appearance and prevent it becoming too large.

This shearing should be started when the plants are small to get maximum density.

Any evergreen can be kept dwarf by pruning as suggested above, paying attention to the different pruning requirements of spruce, pine, and cedar, etc.

Flourishing and Attractive Evergreens

These cannot be obtained if they are neglected. Transplanting gives them considerable setback, as the roots are unavoidably cut. They have to compete with the established roots of lawn grass for food and moisture. They must therefore be kept well watered and fertilized in early spring. A good soaking twice a month is necessary. IF YOUR EVERGREEN IS NOT DEVELOPING INTO A THRIFTY ATTRACTIVE TREE YOU CAN BE SURE THAT IT IS BEING STARVED AND PARCHED.

EVERGREENS ADJUST THEIR FOLIAGE to the amount of water they can get, as they must get sufficient to support transpiration.

If your cedar or other evergreen appears thinly foliated, it is an indication of insufficient water during the summer.

Don't wrap evergreens with cloth or paper during the winter. It can cause suffocation.

Rust in Junipers

Some junipers are susceptible to rust if in the vicinity of an alternate host such as hawthorne, saskatoon, or less often, apple. If it should occur it will show in the form of small woody galls or gelatinous star shaped formations on some of the branches in early spring. These formations should be completely removed and burned to prevent rust developing. Sprays can be used but they are more trouble to apply than simply removing these formations.

Rusty brown foliage in evergreens, especially if webs are present indicate mites; white spots on spruce or pine may indicate scale; and wilting and dying tops of spruce and pine may indicate white pine weevil. If noticed write your Provincial Dept. of Agriculture for control information.

GENERAL CARE OF CEDARS

Dogs are the greatest enemy of both cedar and juniper. Stray dogs are everywhere and will get at them if not planted in a location where they will be inaccessible. Protect with light portable garden fencing spaced about one foot away from the tree.

These evergreens are very conspicuous in winter, and dog damage is usually done at that time, and is often mistaken for winter injury. As snow becomes deep, the garden fencing should be raised so that it will always be above the snow.

Cedar are heavy foliaged, and transpire (lose moisture through the foliage) very considerably. They do not root deeply. They therefore require more watering than most trees to keep them in good shape. Water, however, should be discontinued in early August to hasten ripening off for winter, but they should be watered heavily again from mid-September until freeze-up.

Wind and sun increase transpiration, and if in a position exposed to a long sweep of wind, and to the afternoon sun, some shading during February and March, when roots are in frozen soil and unable to take up moisture, will be helpful. Such shading should not touch the foliage, and it should be open enough to permit a free circulation of air around the tree. In most cases such shading is not necessary, in city lots where housing breaks the force of winds.

If winter sunscald occurs on cedar or juniper wait until new growth starts in early summer and then cut off the dried twigs. Recovery should be complete in late summer.

COLOR IN BLUE SPRUCE

Color is given the trees by a blue powder that covers the needles. Driving snow and sand will grind it off, so that older needles become greenish. A vigorous growing tree will have a large proportion of young needles and this gives the tree a predominately blue color. If the tree is allowed to become unthrifty through drought or poor growing conditions the green color of the older needles will show up more prominently.

PERENNIALS

The same general principles for planting trees should be followed in planting perennials. Be sure the hole is large enough, the soil well packed and well moistened to the bottom of the roots. The crown of the plant should be at ground level. Cover with some porous covering the first winter. Leaves usually form too dense a covering unless mixed with twigs.

Lythrum and Iris Germanica should be well covered with grade tops every winter. Double Hollyhocks must be stored over winter.

Many perennials require renewing by taking young portions off the old plants and setting them out in the garden, every year or every second year. The older plants tend to become root bound and diseased if this is not done. This can be done with those perennials that enlarge by making new shoots around the outside. Some perennials, for example, peonies, columbine, etc., do not do this, and should not be disturbed.

GARDEN CHRYSANTHEMUMS

These are of borderline hardiness. They often winter out-of-doors, especially if given some protection, but cannot always be depended on to do so. Slips may be taken in the fall, and rooted indoors, setting them out in the spring. This ensures continuity, and also gives more vigorous plants. Cover plants with paper or sheet on very cold nights in fall to prevent damage to blossoms.

LILIES

These bulbs are usually planted deeply, four to six inches in depth.

PEONIES

These must not be planted too deeply or they will not bloom. The eyes should be $1\frac{1}{2}$ to 2 inches below ground level. They should be well away from trees and shrubs. Cover well for the first winter, using 6 inches of potato tops, manure, spruce boughs, or something similar, and for a distance of two feet around the plant.

CARE OF FRUIT TREES

Mice and rabbits may injure the bark of some trees during the winter. Protection against rabbits can be secured by painting with a good rabbit repellent, or by wrapping or fencing with poultry wire.

Mice can be repelled by placing a close mesh wire, a sheet of tin, or tar paper with other paper inside, around the tree. Care must be taken to leave not even a small opening and to push the bottom into the soil, as mice can force through extremely small holes. Poisoned gopher bait is also effective against mice, but should be placed in secure containers with a small opening to prevent anything else getting at it.

Fire Blight in Apples and Crabs. This will show in the browning and drying of leaves on one or more branches. It can be checked only by cutting off the affected branch as soon as noticed, cutting back about 8 inches into unaffected wood. Otherwise infection can be carried on the knife. Burn immediately, as bacteria spreads from the dead branch.

Most varieties sold on the Prairies have a high degree of resistance, and the disease can be easily cleared up if affected branches are removed and burned as soon as noticed.

Don't waste time with sprays or dusts. They are not effective against fire blight.

NON-FRUITING is at times a problem with fruit trees. In general, plum trees are self-sterile. That is, one variety of plum tree will not pollinize itself, even though there may be many trees of the one variety present. Two or more trees of different varieties must be present to get them to set fruit, and they should be of similar blooming periods.

Apples and crabs are self-fertile and one tree will usually bear fruit. The set may be improved, however, if two or more different varieties are together.

Soil factors which induce excessive wood growth may result in failure of fruit set. Over-fertilization, particularly with nitrates, or soil that is too rich in nitrates, or excessive moisture can cause this condition. Girdling or partial damaging of the cambium layer on the main trunk will often offset this condition but it must be very carefully done to avoid damage.

GRAFTED TREES

These are grafted on roots which may send up shoots. These shoots should be dug or cut off cleanly at the point where they grow from the main root. If allowed to grow they will eventually choke out the grafted tree.

CURRENTS AND GOOSEBERRY

Current fly causes premature dropping of fruit. Allowing hens the run of the planting is helpful. Turning over the top two inches of soil under the bushes in late fall helps. Spraying is also effective.

Black Currants fruit only on two-year-old wood and it is therefore desirable to remove old wood and keep a good growth of young wood coming on.

STRAWBERRIES



Strawberry plants must be planted with the crown of the plant level with the surface of the soil as shown in the illustration. If the crown is buried the plant will have difficulty growing, and if the crown is above the surface the roots will dry out. In either case there will be losses. Be sure to pack the

soil firmly around the roots as advised in general planting instructions. Water often until growth is well under way, taking care that the water gets down to the bottom of the root and that it does not wash the soil over the crown or wash soil away from the upper part of the root.

Plant in rows three and one-half feet apart and twelve inches apart in a row. Cover the plants late in the fall with one or two inches of prairie hay or straw (if free from weed seed). This covering should be removed from the plants in early spring or left as a mulch under the plants.

As the strawberry patch becomes established do not let the rows become too thickly matted with plants. For best fruit the plants must be kept thinned out, must be kept well watered, and must have an occasional feeding of plant food or well rotted manure.

Strawberry plants are biennial. Older plants will die out within a year or two, or lack vigor and produce poor fruit. In thinning, select the most vigorous younger plants and hoe out the older ones every year. Pinch the ends of the runners off to prevent too many young plants from forming.

If berries are small and crop poor, it can usually be blamed on insufficient water and over-crowding.

RASPBERRIES

Raspberry rows should be four feet apart and planted from one to two feet apart in the row.

If a hill system is desired space hills about four feet apart each way, and aim to keep 5 or 6 vigorous young shoots coming in each hill to bear fruit the following year; remove the surplus young canes and old canes, as soon as they have finished fruit-

ing. In sever climates, the canes are often bent over and tips covered with soil for protection, for winter. Do not let the planting become crowded with young plants as this reduces quality of fruit.

If planted in rows about two good vigorous canes to a foot is ample when the planting is established. Overcrowding results in small berries and poor yields.

Raspberries fruit on second-year wood. Older wood is unproductive, and susceptible to plant troubles. Comments on feeding, thinning, and moisture, in the strawberry section are applicable also to raspberries.

CARE OF ROSES

Remember that all Tea, Floribunda and Grandiflora Roses are grafted and shoots from the roots must be removed, or they will choke out the desirable rose.

Apply a good rose fertilizer as soon as snow has gone in the spring.

The rose beetle will often cause wilting of flower buds on hardy shrub roses. It can be controlled by a weekly spraying or dusting with 50% horticultural DDT from time flower buds appear until flowers fall.

PLANTING TEA AND FLORIBUNDA ROSES



The green stems dry out very quickly, and this must be prevented until new growth starts.

Plant with the point where the stems branch out from the root three inches below ground level as shown in the illustration, packing the soil firmly and watering well. Keep canes covered with wet soil or continually wetted burlap until buds start to grow. Buds on stems begin to enlarge, usually in two weeks after planting. Leave a slight depression to hold water. Keep well watered all summer. When the flowers fade, cut them off

to stimulate further development.

Spray at seven to ten day intervals with a good rose dust or spray.

WINTERING TEA AND FLORIBUNDA ROSES

These have been wintered very successfully on the prairies by giving the soil a good soaking in late fall and by covering with dry insulating material such as sawdust. It must be kept dry. Cut the canes off level with the top of the insulating material and place waterproof material over the top to keep out moisture, having it sloped to the sides to shed rain and melting snow.

The Rose will kill back to within a few inches of the ground. Cut off dead wood in spring. A large flowering bush will develop these short stems.

Some growers winter by simply planting the graft 4 inches below ground level, throwing soil or other covering over the bush for the winter, and letting them kill back to ground level. They depend on the few inches above the graft but below ground level to produce a bush the next year, if the top kills back.

This is satisfactory since only one or two inches of live stem will produce a fine flowering bush for the next season.

Digging and storing is not usually satisfactory.

REMEMBER ALL ROSES GROWN OUT OF DOORS WILL STAND 10 OR 15 DEGREES OF FROST WITHOUT INJURY.

CLIMBING ROSES can often be planted permanently out-of-doors and wintered by bending the stems into a trench dug in the ground, covering them with dry insulation and some waterproofing material to prevent insulation becoming wet, and then covering with about a foot of soil. This should be done in late October, and uncovered in late April. Some cutting of roots on one side may be necessary to permit bending stems to the other side.

CLEMATIS JACKMANNI

This vine will kill back to ground level every winter in colder climates. In fall, after frost has killed the flowers, the vines should be cut off about 3 feet from the ground, laid down and covered with soil to about 8 inches deep.

Uncover in spring after heavy frosts and tie upright.

CARE OF BIRCH TREES

Birch grow naturally along river banks, usually on the shaded side, and are moisture loving. Dry conditions in the average lawn will often make them unthrifty. They should be given a heavy soaking three or four times during the summer letting the hose run on the soil around them for 10 or 15 minutes at a time. Fertilizer put into the roots with a root feeder is very beneficial, in early spring or late fall. If possible create a wide depression in the lawn around the tree to hold water.

FERTILIZING

FERTILIZING is essential for ornamentals if you desire to get the most out of them. Shrubs, trees and perennials, also annuals, will always do better if given some fertilizer. This should not be overdone. In the case of slow acting commercial fertilizers a large teaspoonful to a large tablespoonful to each tree, depending on size, in early spring. On lawns a root feeder puts the fertilizer down where the tree can use it. Don't fertilize in early fall. Don't put fertilizer or manure of any kind in the hole with the roots, and don't fertilize the first year of planting. Well rotted barnyard manure is good. Bonemeal alone is not desirable for prairie soils. Mixed with larger proportions of blood meal it is satisfactory. Lime should never be used on most prairie soils.

STOCK ARRIVING IN FREEZING WEATHER

If stock is received in freezing weather put the unopened bale in a cool spot and let it thaw out very gradually. Quick thawing will injure nursery stock but gradual cool thawing will bring it through unharmed. In fall, if too late for planting, the frozen crust of soil in garden can be removed and the stock buried for winter, planting first thing in the spring.

PRUNING HEDGES



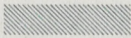
Right

Wrong

Prune hedges as shown in the illustration, with sides perpendicular or wider at the bottom. This will encourage good foliage development from top to bottom.

YELLOWING OF

Chlorosis is a condition which causes some of the leaves of some trees to turn yellow or white, making the tree unthrifty. This is usually a soil condition, and can be cleared up by sequestrene of iron to the soil.



LAWN CARE

LAWN ROLLING is of doubtful value on any established lawn. A new lawn — not yet rooted — should be lightly rolled when in a moist condition but not soggy. Rolling the lawn is not necessary for levelling but to ensure a good union of sod and soil or seed and soil.

FERTILIZING of lawn grasses is most important. For maximum efficiency when safety of application is being considered, a 10-6-4 or equal slow release nitrogen formula is recommended. Application as per manufacturer's recommendations at least three times a year is advised; namely in May, early July, and September. Use only well known turf fertilizers and apply with a recommended spreader. Light top dressing and seeding can also be beneficial in the early spring to level and correct winter damage.

MOWING — Preferably twice a week at approximately 1½" height. To prevent excessive thatch build-up, an appropriate catcher should be used. Make sure that the mower is sharp at all times and reel type mowers are recommended because they cut and seal the blade of grass as opposed to the breaking action of other types. A good raking in the fall to remove accumulated thatch is also advisable.

WATERING — is very important and overwatering is as serious an offence to a new lawn as underwatering. Use a good sprinkler and water the lawn each day to maintain a moist but not soggy condition. Established lawns will promote better root systems with more infrequent heavier watering to penetrate moisture from four to six inches probably twice weekly.

WEED CONTROL — in turf is best maintained by a vigorous well fertilized stand of grass. A good watering and maintenance program is essential. Application of 2-4-D sprays are effective control for most broad leaf weeds. Methods of control of other weeds disease problems, fungi, etc., should only be undertaken on the advice of an expert.

LEECH PRINTING LTD.
BRANDON